Abstract

This invention provides a new through weld method to carry out welding of a base metal made of aluminum or that of aluminum alloy using high energy beams wherein a shield gas ambience (an inert gas ambience) to cover a welding site in a submerged-scar is formed, even a shield gas ambience (an inert gas ambience) to cover a welding site irradiated by the high energy beams. Since the former shield gas ambience to cover the submerged-scar pushes the keyhole against the gravity and/or the gas pressure force of the latter shield gas supplied to the laser irradiation side, then the forming of hang down of beads and the resultant projection of the welding base metal are prevented.